

FIG. 3A

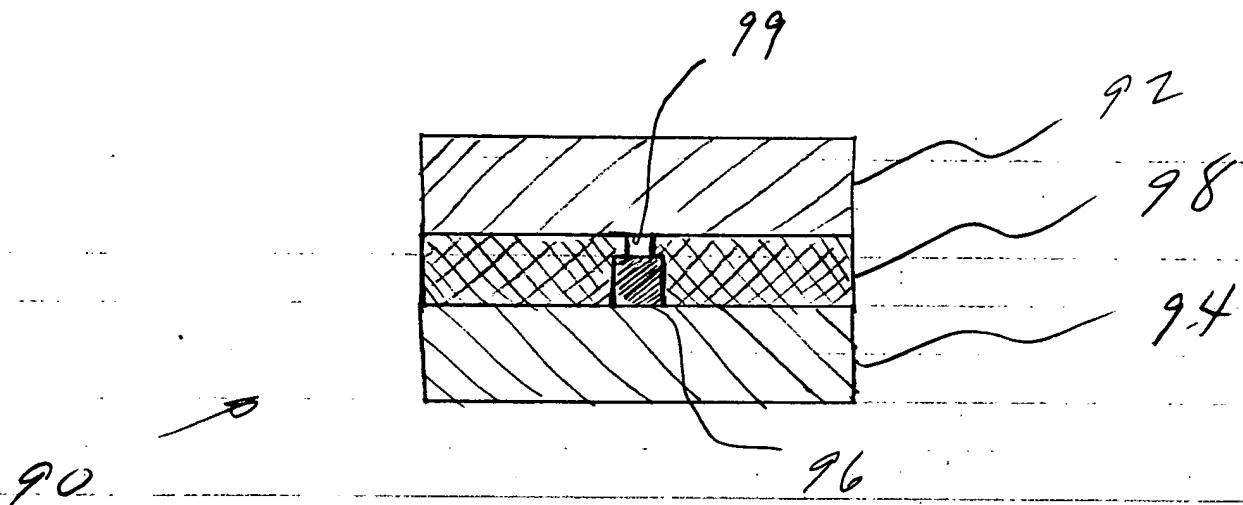


FIG. 3C

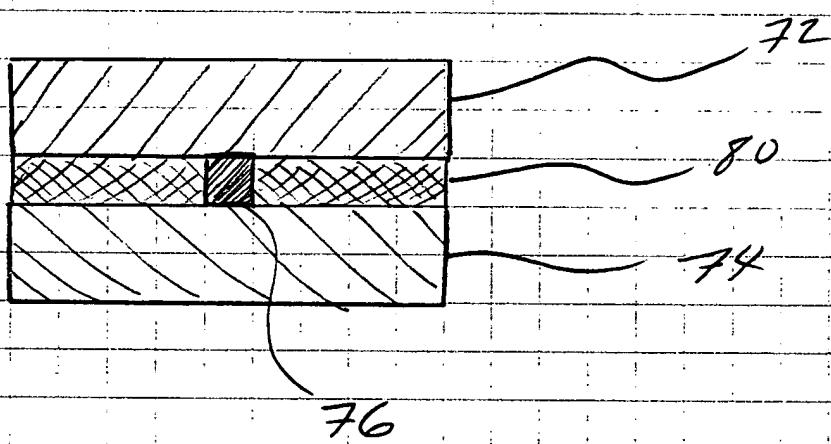


FIG. 3B

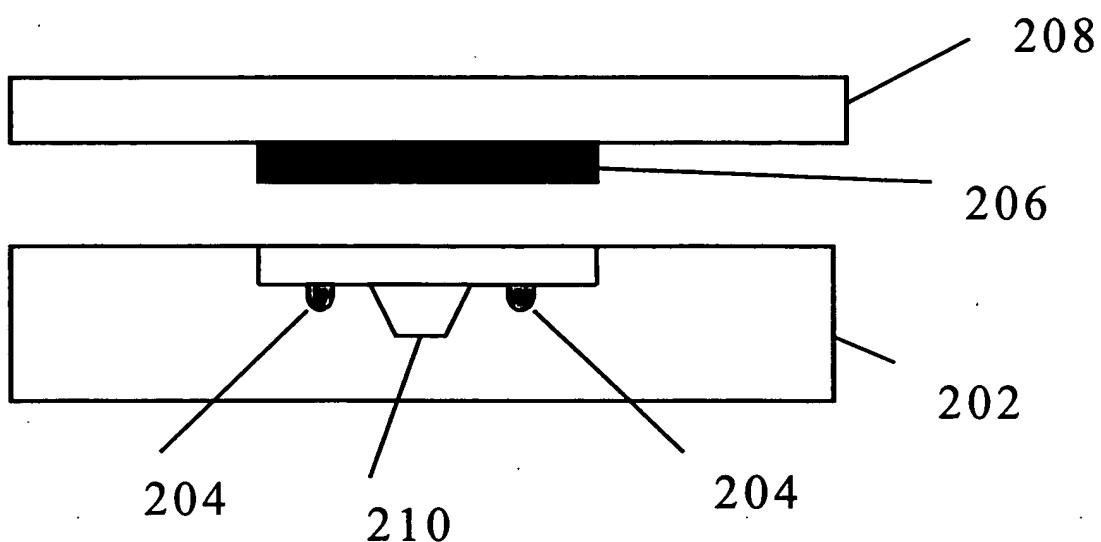


Figure 4A

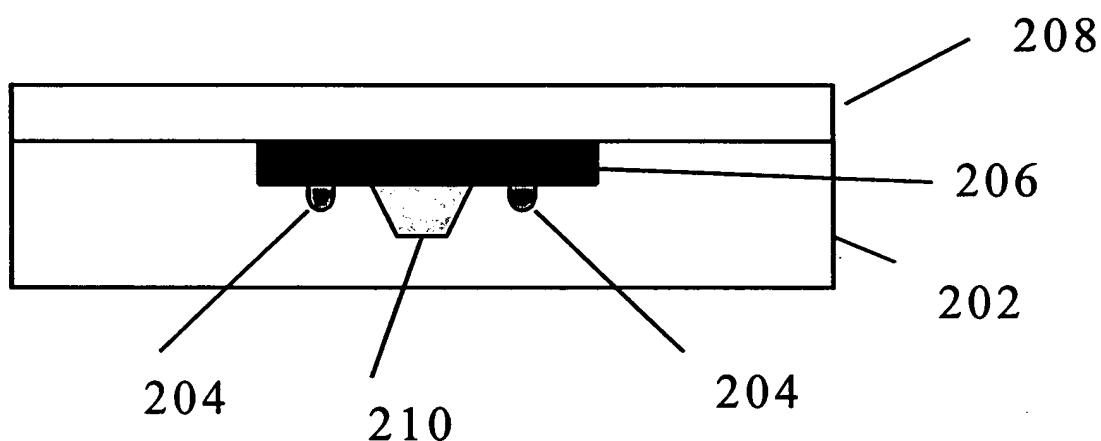
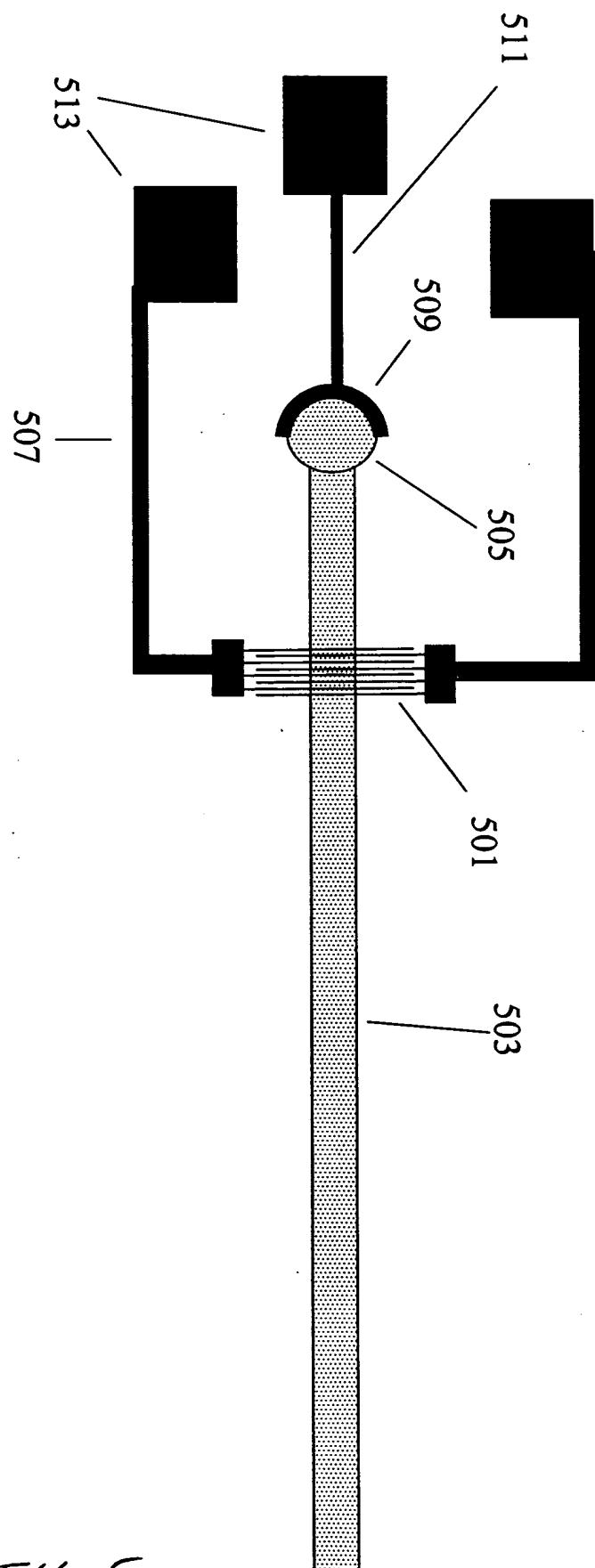
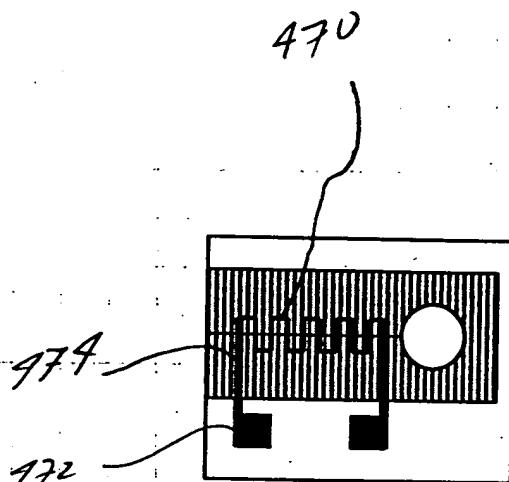
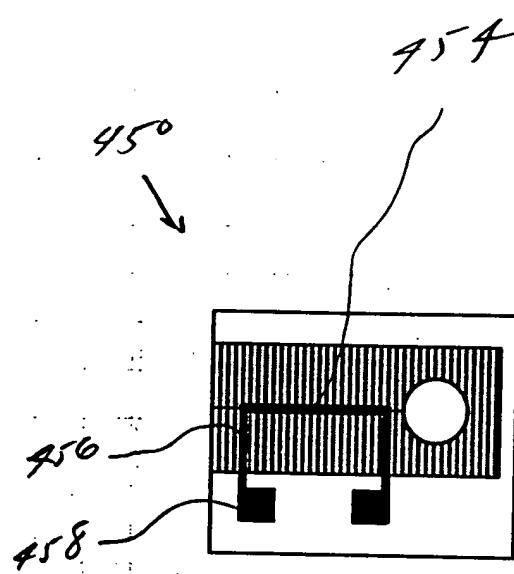


Figure 4B

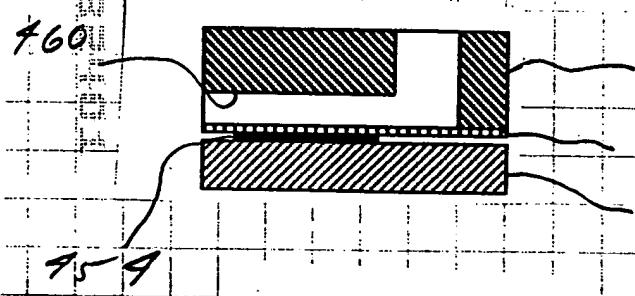


F16. 5

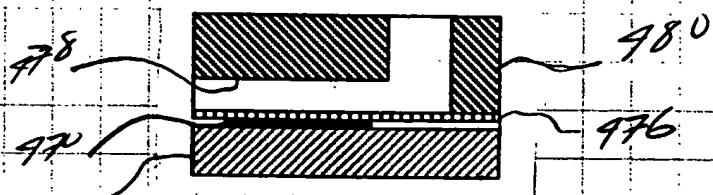


F16. 6A

F16. 6C



F16. 6B



F16. 6D

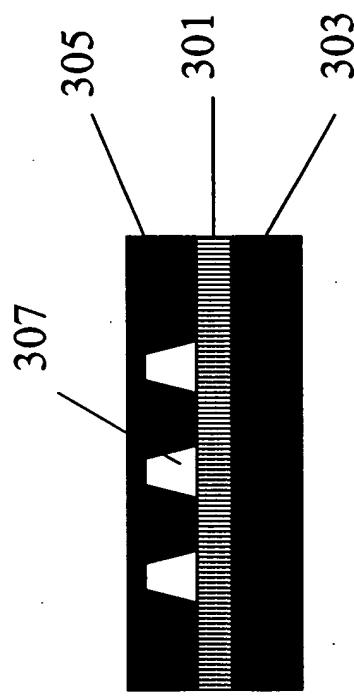


Figure 7A

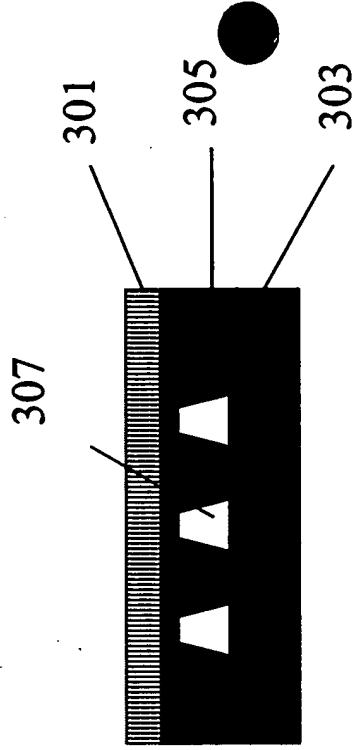


Figure 7B

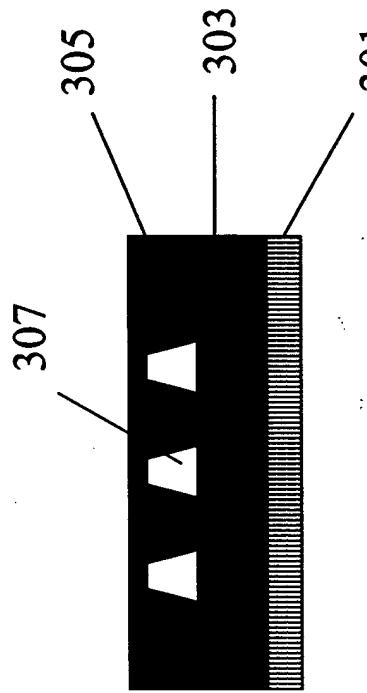
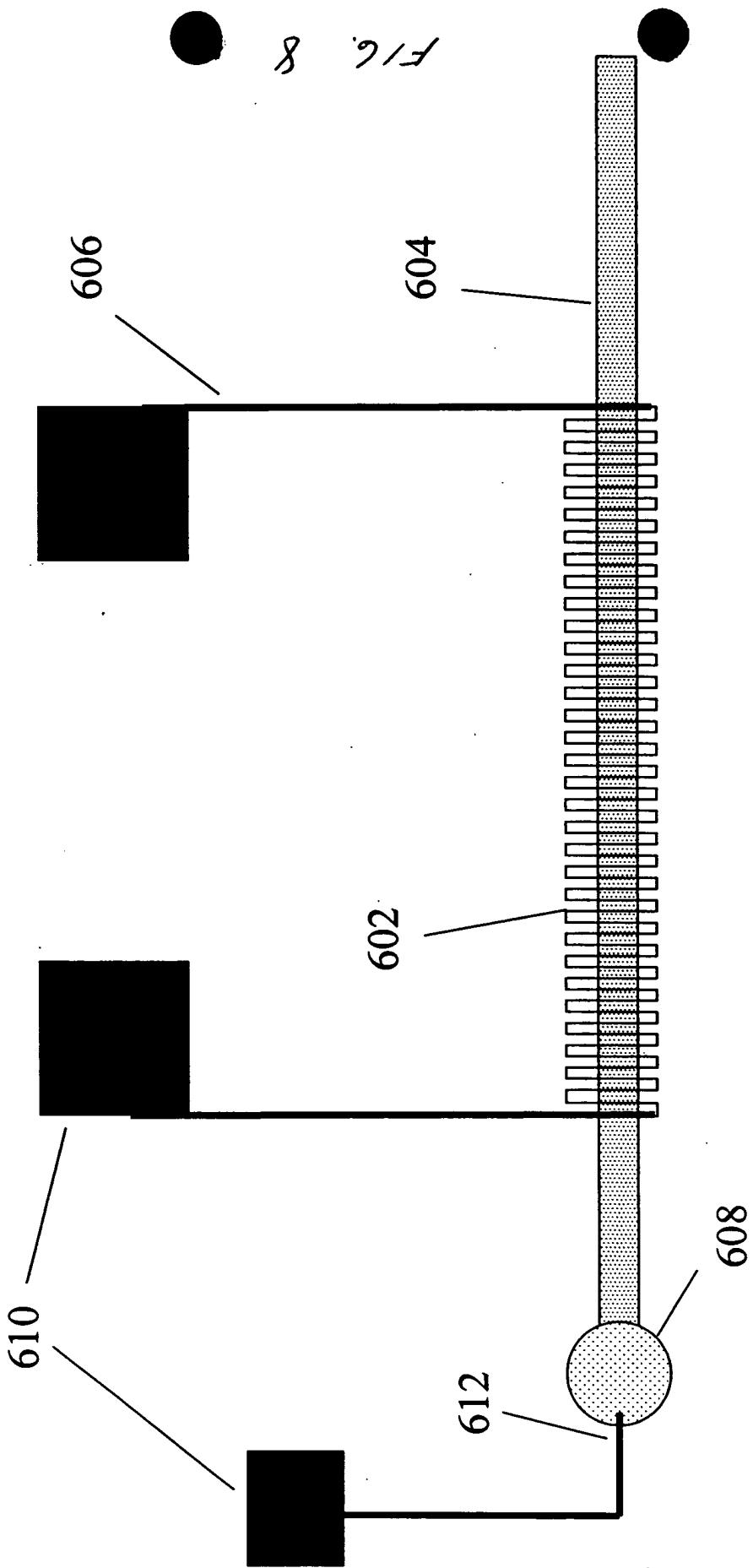


Figure 7C

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ELECTRODES
First Inventor: Mingqi ZHAO
Application No.: To Be Assigned
Document No.: 427922000920

Short Title: MICROFLUIDIC CHIP HAVING INTEGRATED
ELECTROODES
First Inventor: Mingqi ZHAO
Application No.: To Be Assigned
Docket No.: 427922000920

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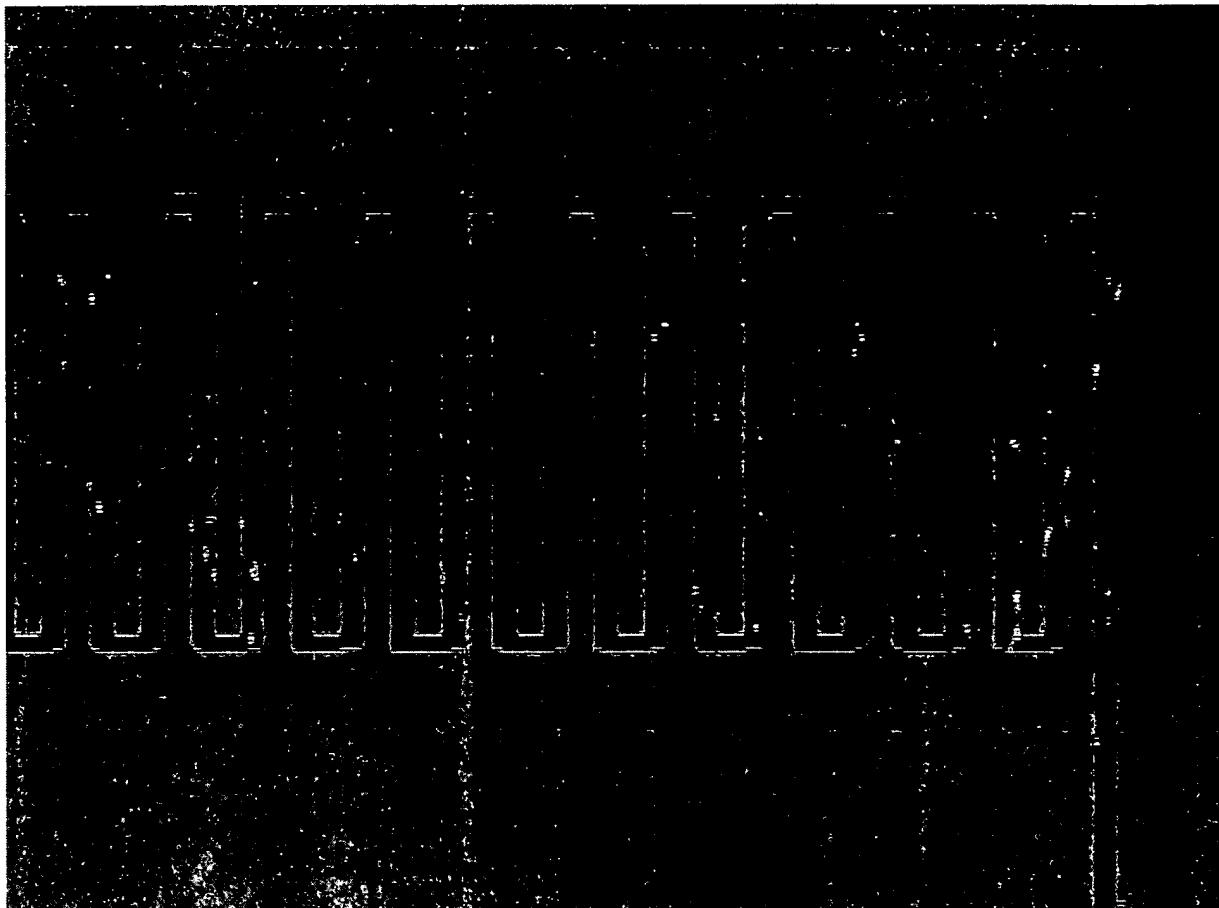


FIG. 9

100

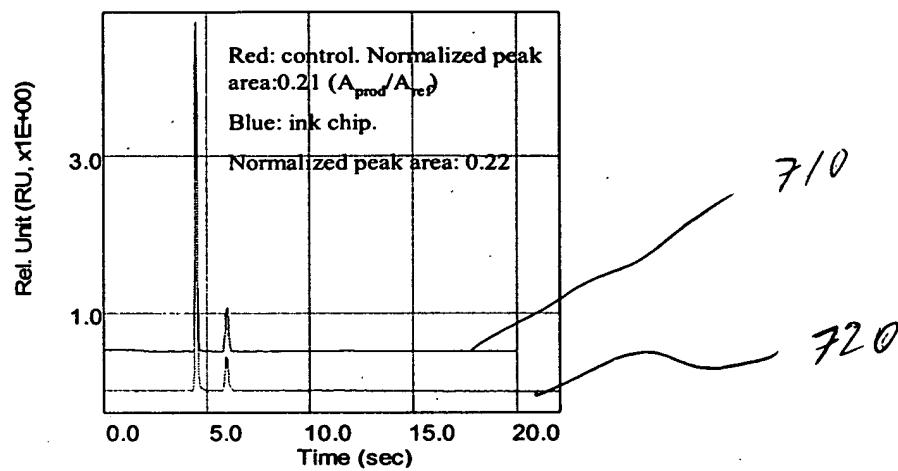


FIG. 10

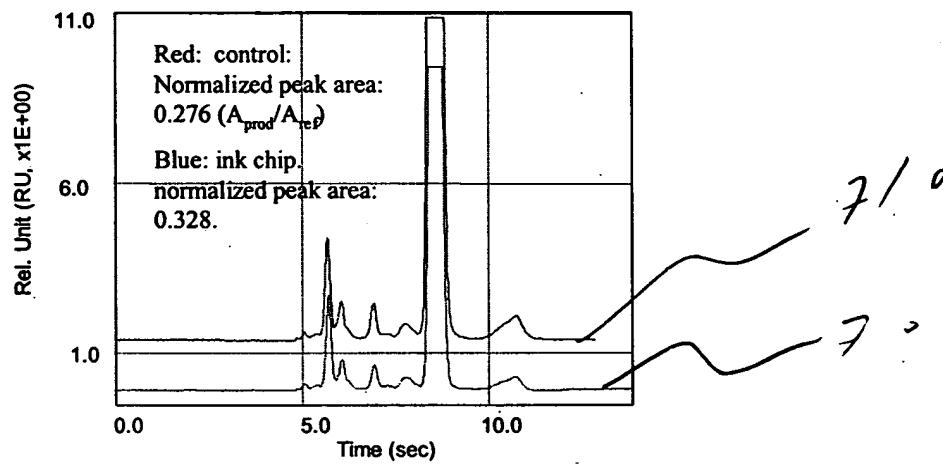


FIG. 11

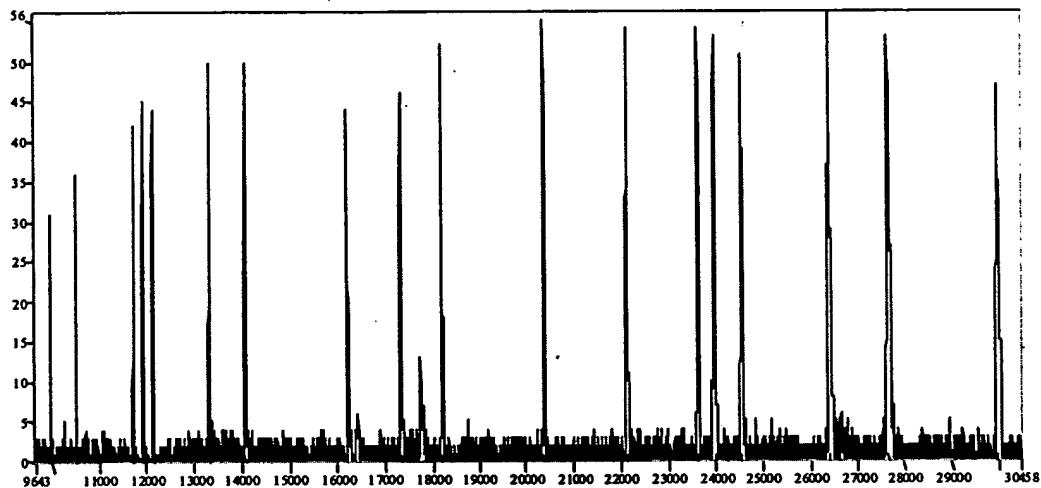


FIG. 12A

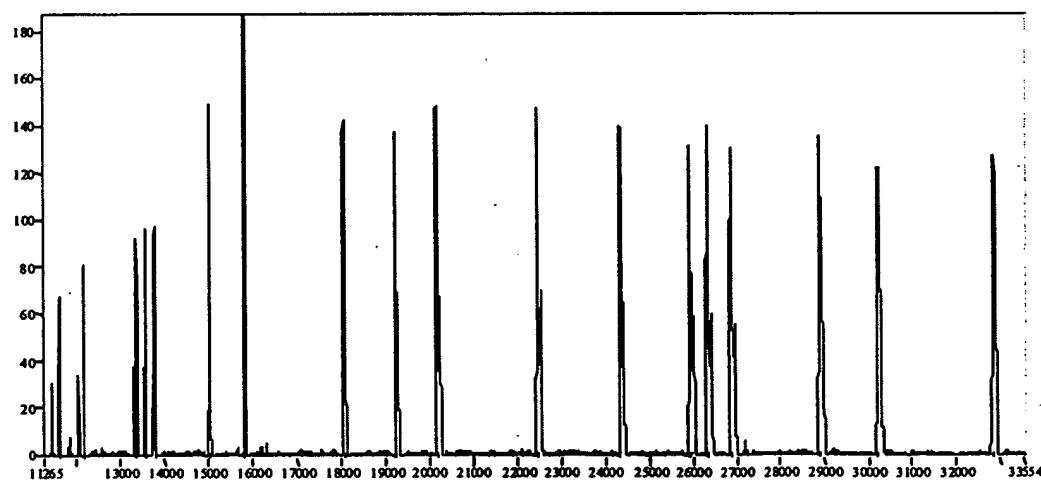
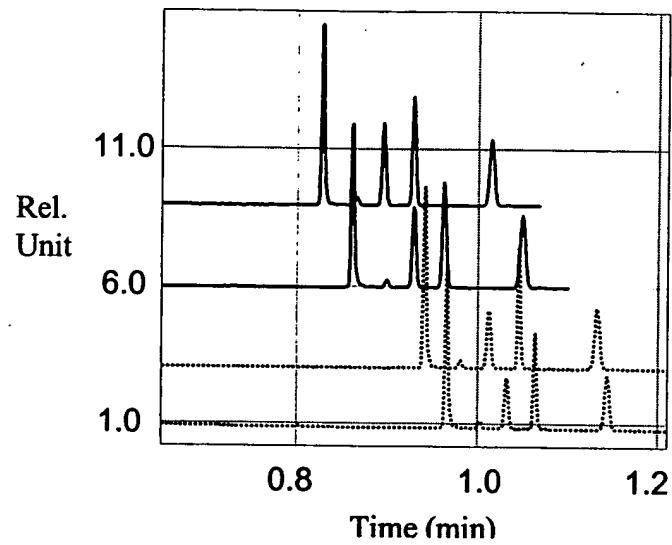


FIG. 12B



F16.13

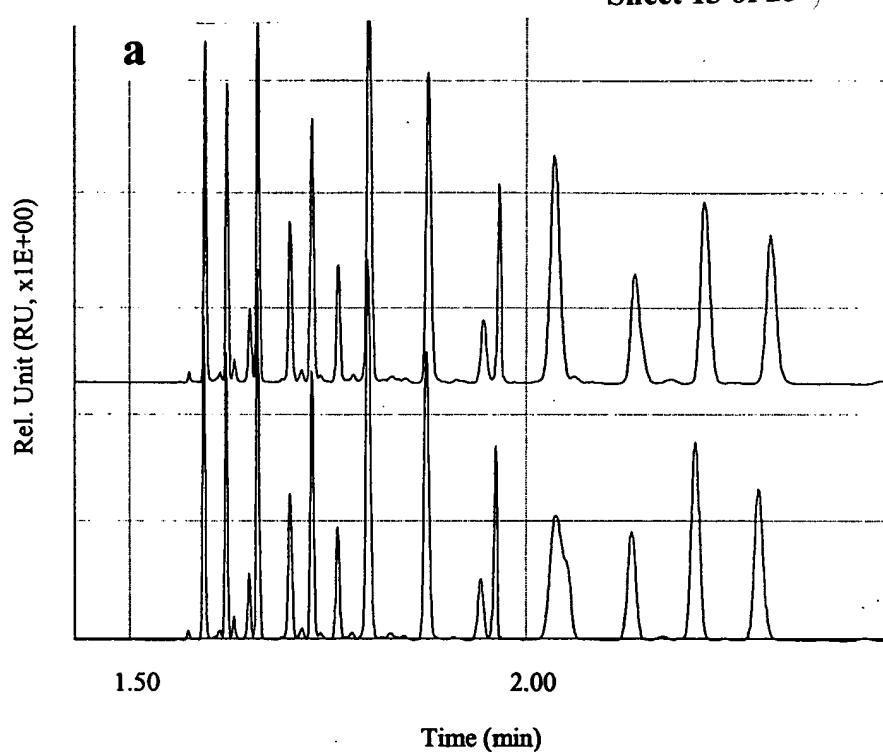


FIG. 14A

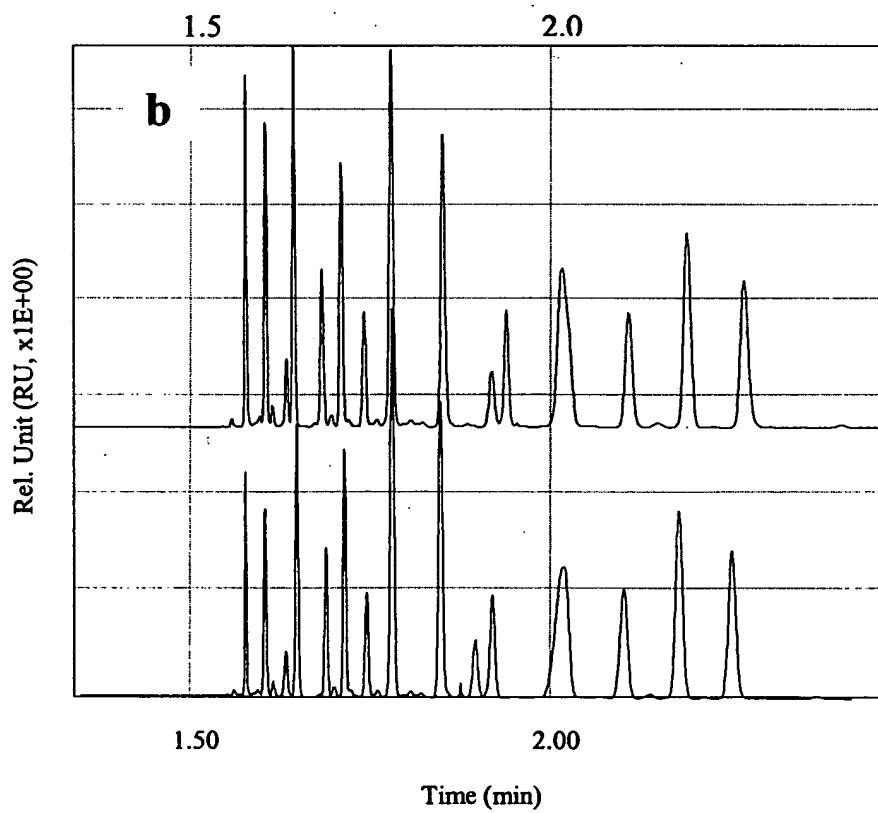


FIG. 14B

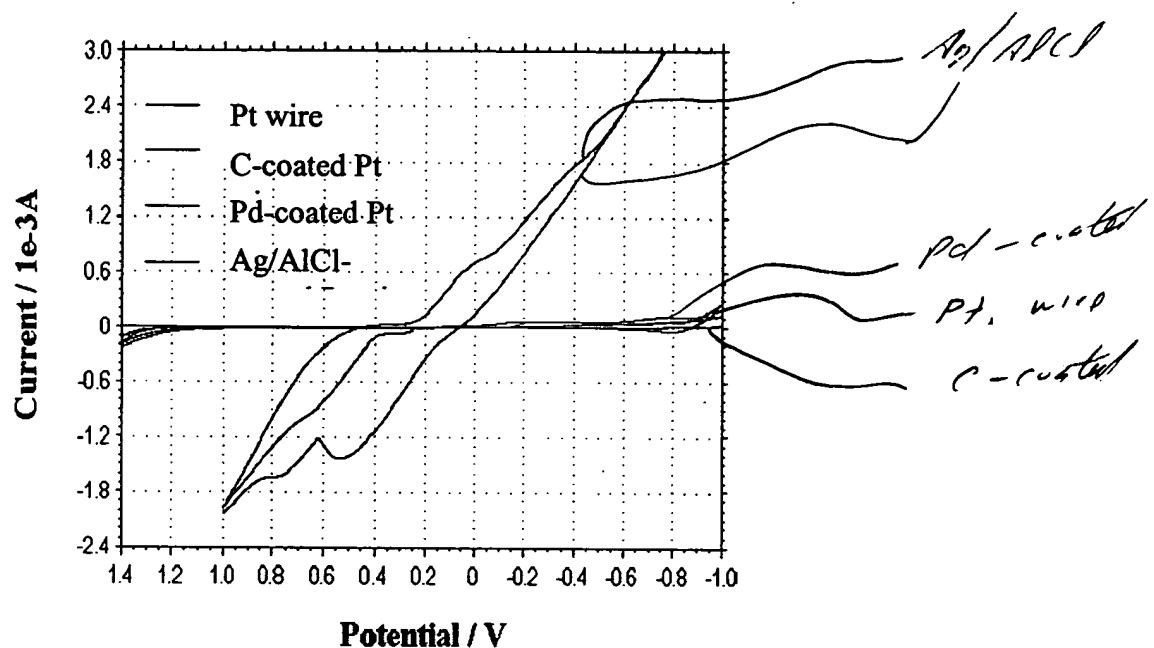


FIG. 15A

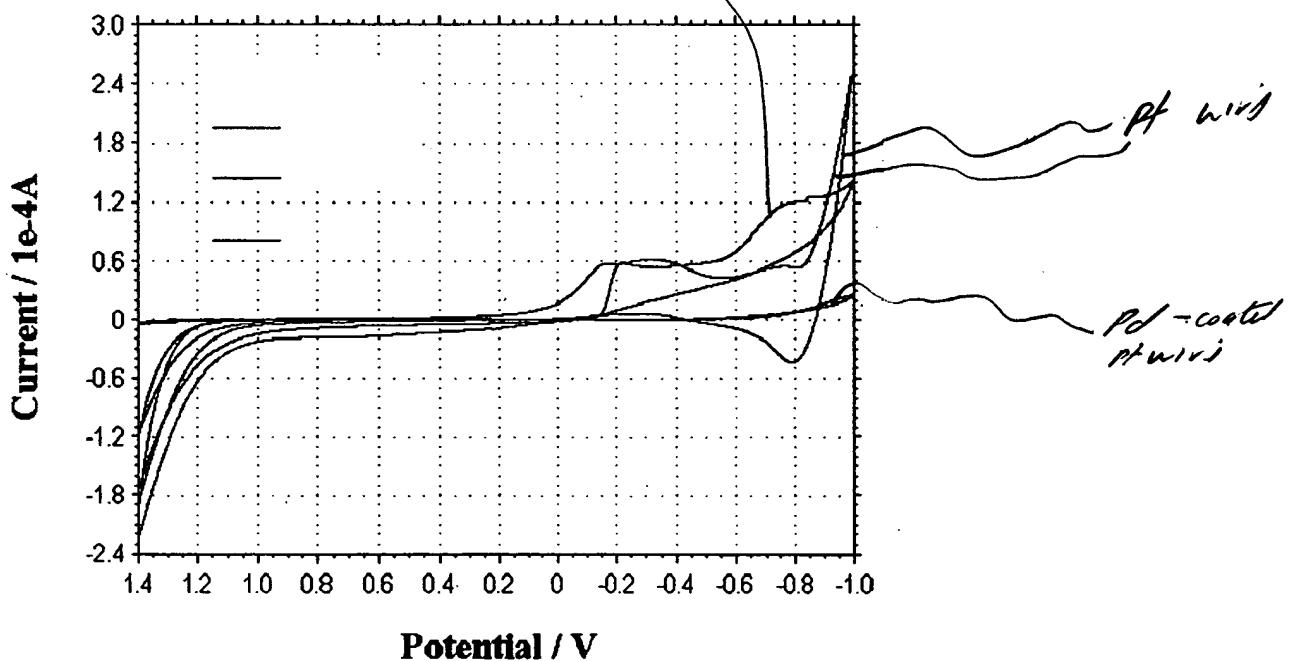


FIG. 15B

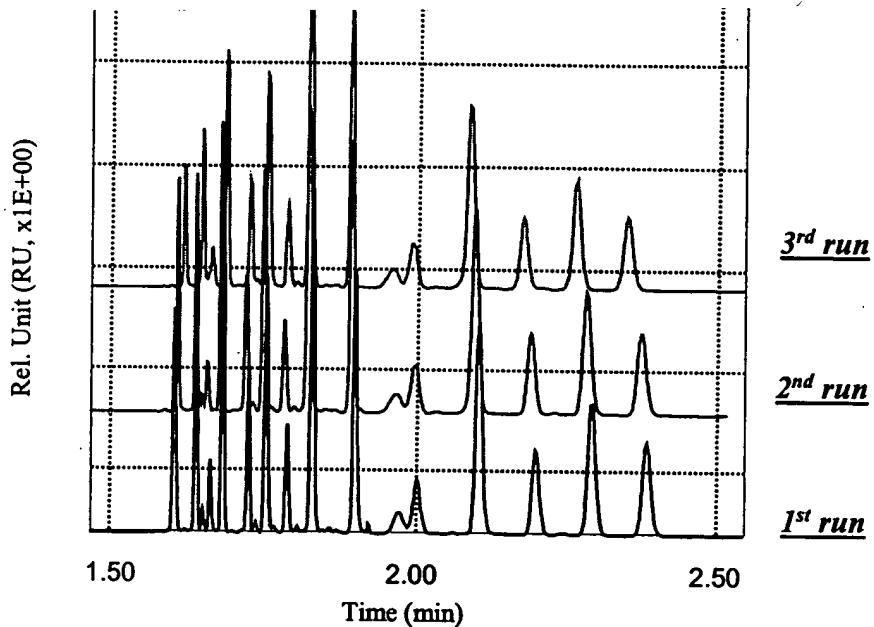


FIG. 16

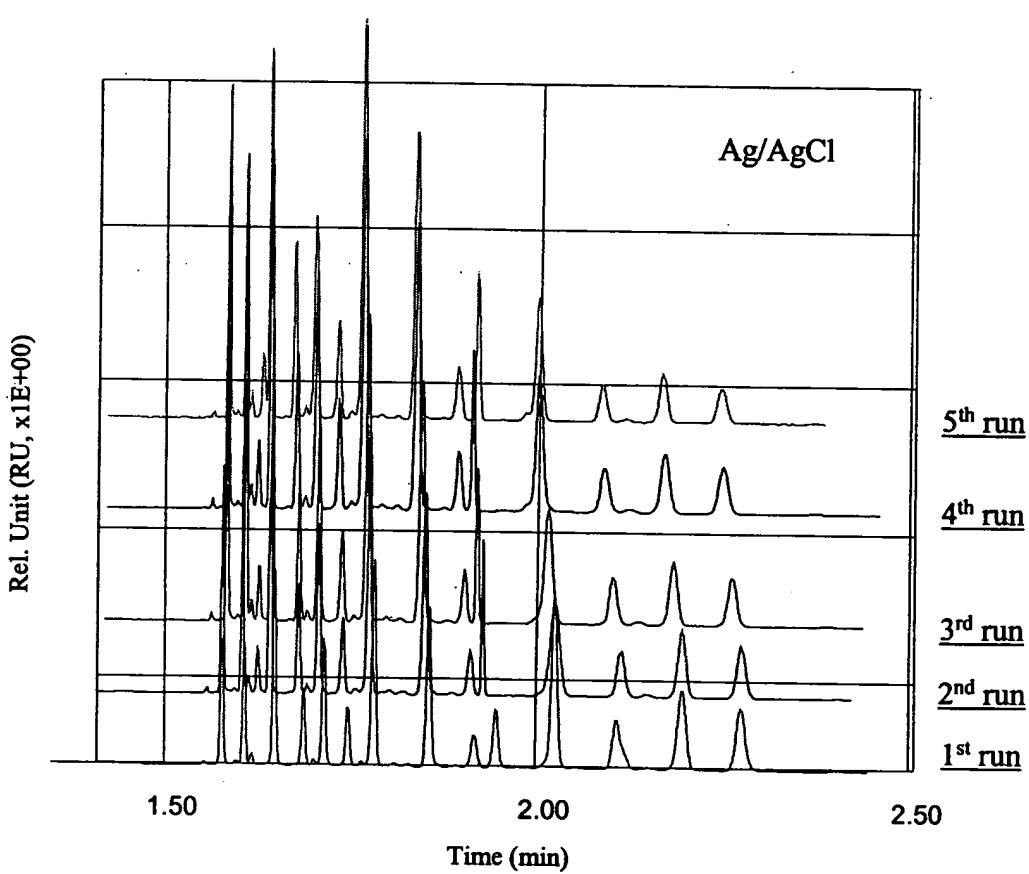


FIG. 17

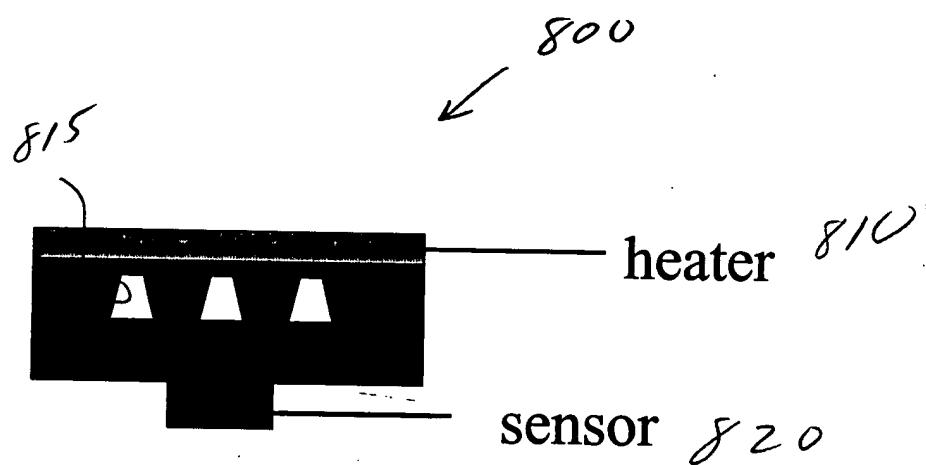


FIG. 18

Repeated unit heater, $R =$
 760Ω

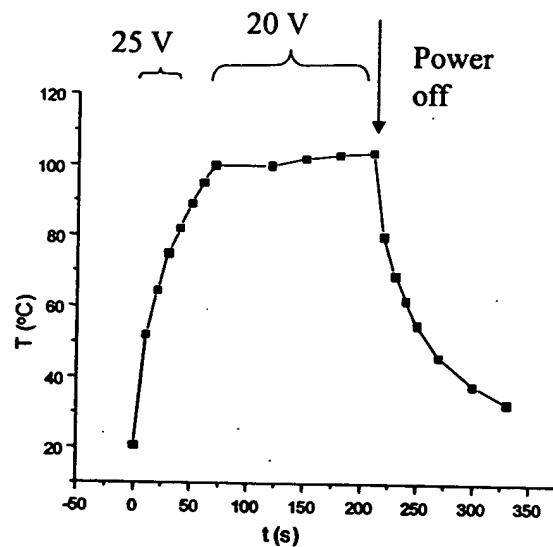


FIG. 19

$R = 205 \Omega$
Power off

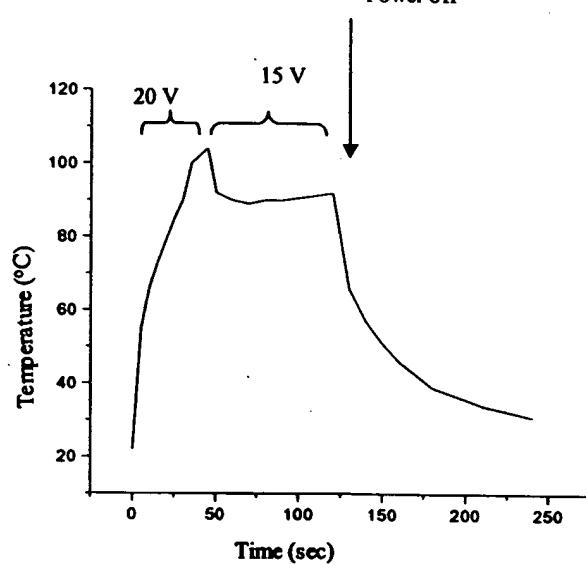


FIG. 20

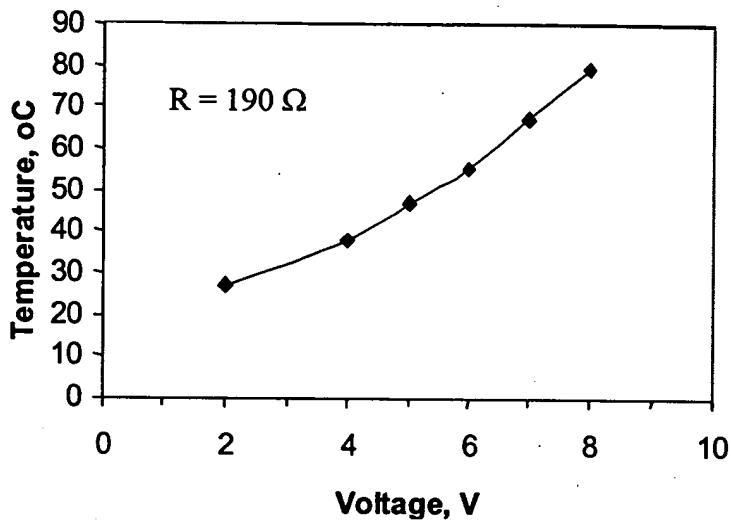


FIG. 21A

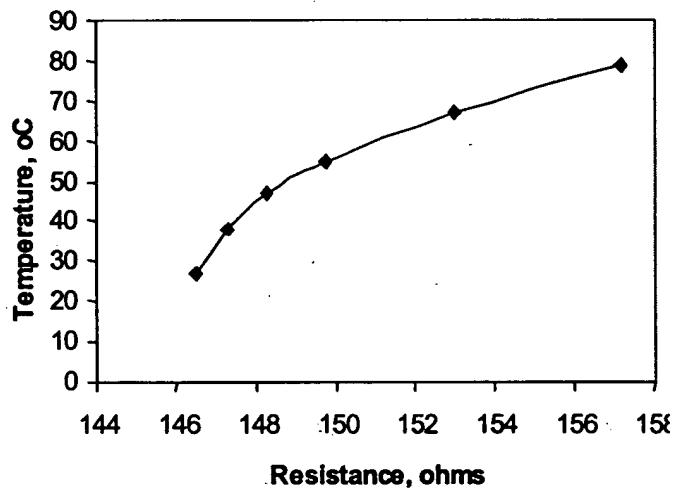


FIG. 21B

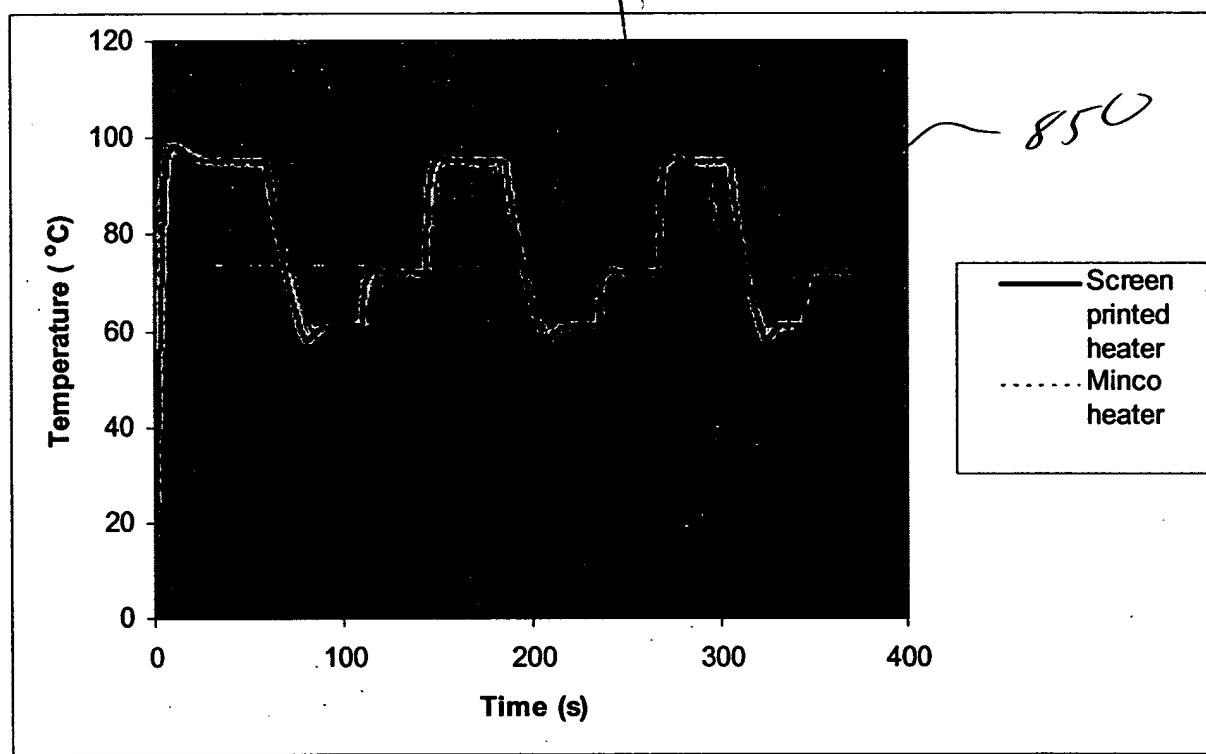


FIG. 21C

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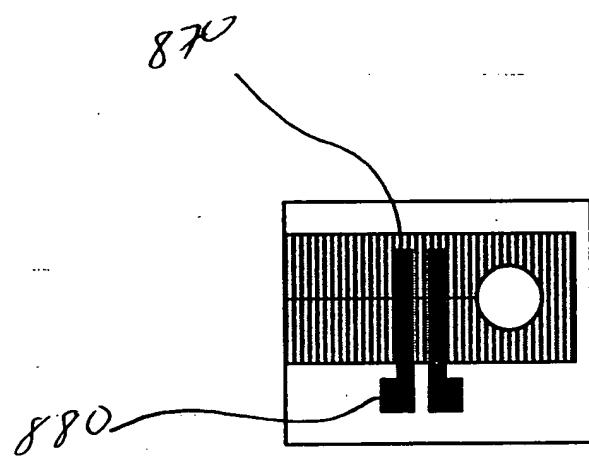


FIG. 22A

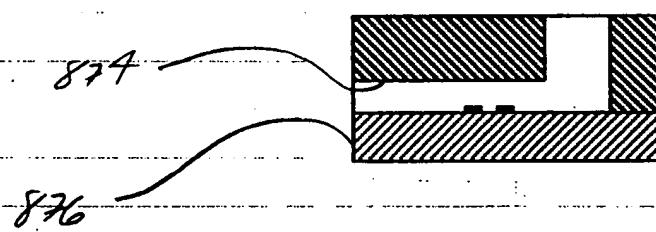


FIG. 22B

FIG. 23

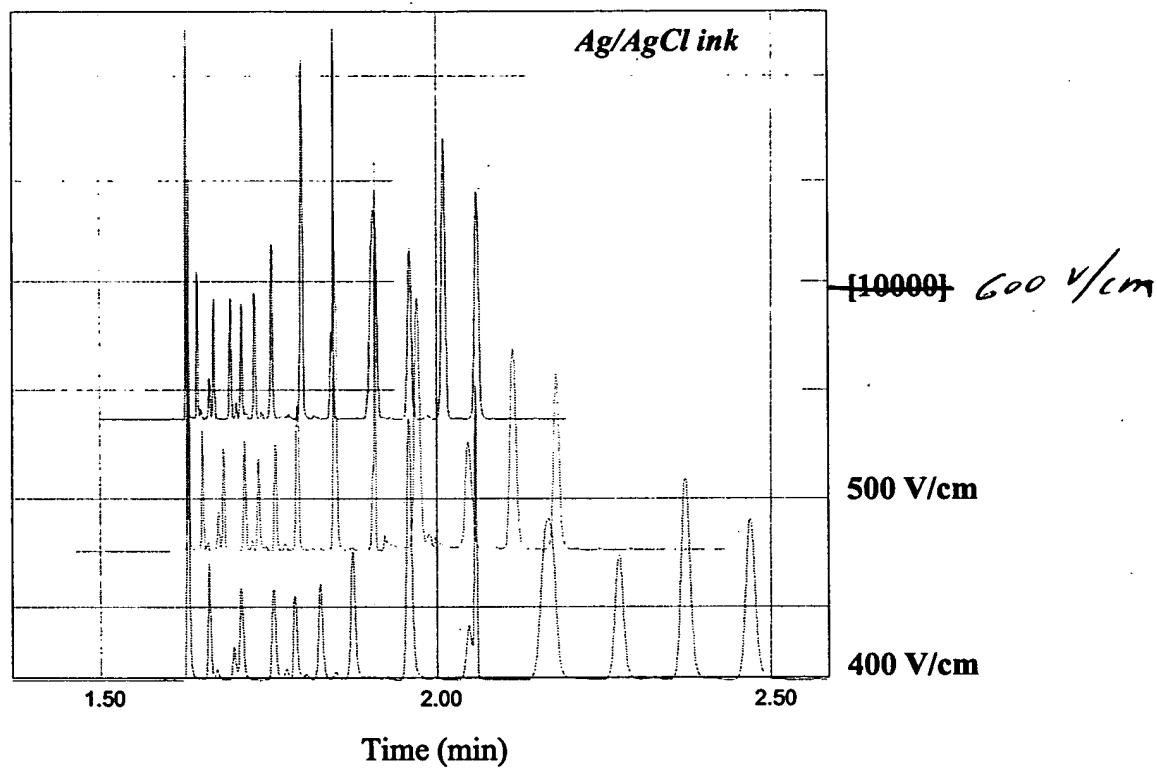


FIG. 24A

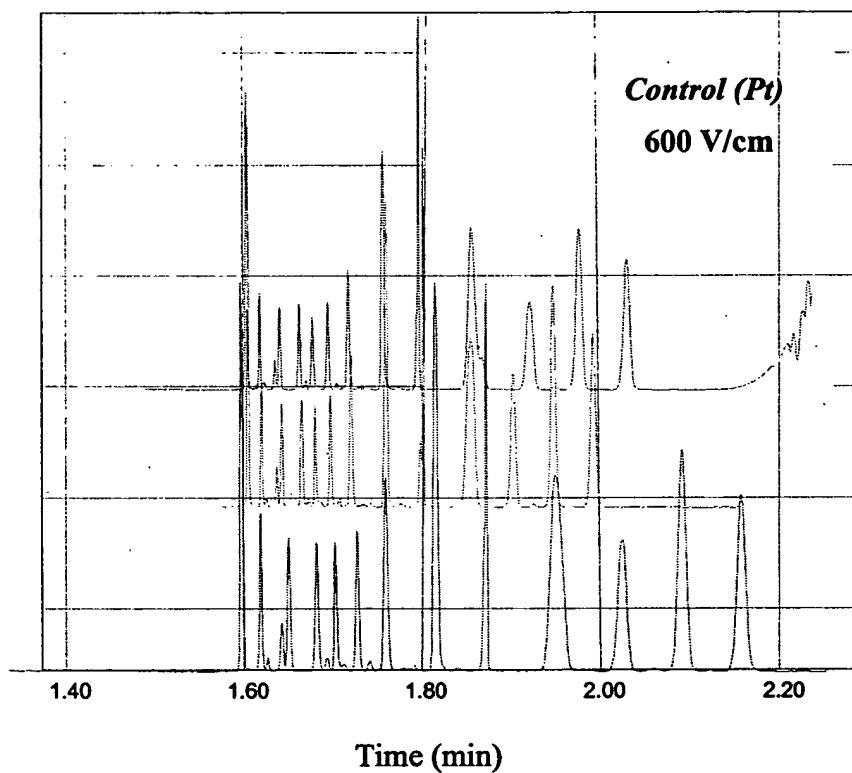


FIG. 24B

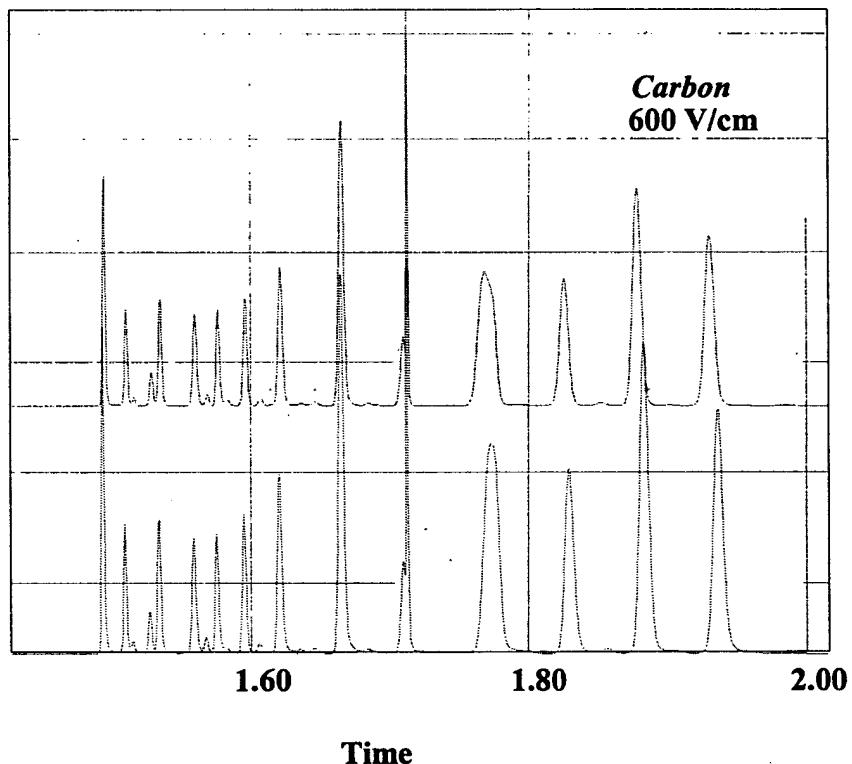
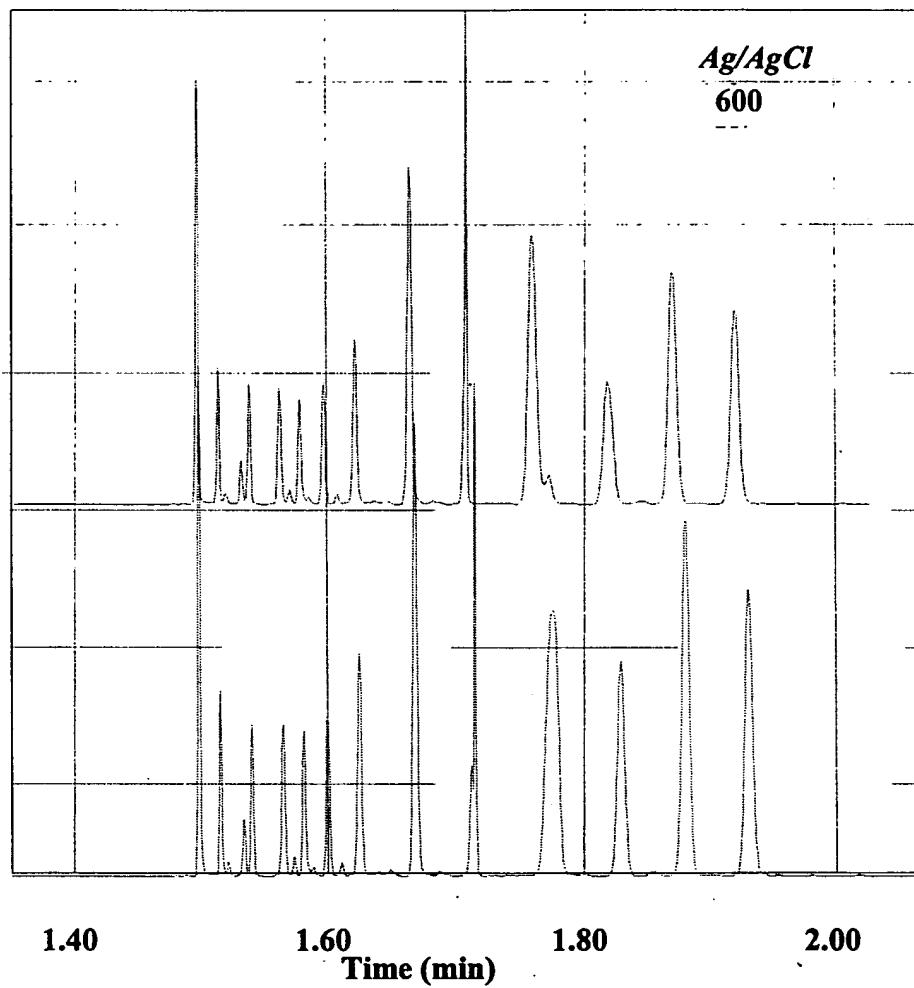


FIG. 24C



eTag Probes (-FC)	Migration time				Normalized peak height				Half peak width				Resolution			
	Average		CV		Average		CV		Average		CV		Average		CV	
	Pt	Ink	Pt	Ink	Pt	Ink	Pt	Ink	Pt	Ink	Pt	Ink	Pt	Ink	Pt	Ink
163	1.56	6.61	0.19	0.69	0.56	2.81	4.74	0.15	0.12	33.81	4.60					
158	1.58	1.51	6.80	0.19	0.27	0.22	1.61	2.45	0.15	0.13	25.18	2.79	1.01	0.81	25.92	0.70
33	1.61	1.54	7.08	0.18	0.34	0.27	4.80	3.40	0.17	0.15	27.95	0.98	1.36	1.08	19.80	1.18
26	1.63	1.56	7.40	0.23	0.30	0.25	3.57	2.77	0.21	0.18	30.71	2.40	1.38	1.04	27.73	1.30
25	1.65	1.58	7.49	0.22	0.26	0.22	3.28	1.57	0.17	0.16	23.50	4.94	1.05	0.89	13.48	1.44
174	1.67	1.60	7.73	0.22	0.30	0.27	4.16	2.37	0.20	0.18	25.84	2.82	1.32	0.86	44.60	0.90
1	1.70	1.62	7.98	0.22	0.48	0.41	0.29	5.20	0.23	0.20	27.30	2.42	1.51	0.81	70.08	13.70
187	1.75	1.67	8.41	0.21	1.01	0.88	4.52	0.54	0.25	0.22	26.68	1.91	2.04	1.14	63.05	0.66
188	1.80	1.71	8.85	0.37	0.63	0.59	5.03	6.99	0.10	0.08	34.24	6.73	2.17	1.07	33.52	9.03
189	1.86	1.77	9.45	0.72	1.54	1.42	2.98	1.25	0.76	0.53	30.56	29.77	1.99	1.03	30.19	6.73
190	1.92	1.82	10.07	0.50	0.75	0.71	0.64	1.02	0.49	0.46	39.83	21.75	1.59	1.00	47.68	6.52
191	1.98	1.87	10.64	0.41	1.20	1.18	0.33	0.23	0.47	0.42	37.31	10.72	1.72	1.04	45.94	0.27
192	2.04	1.92	11.08	0.44	1.00	1.00	0.00	0	0.49	0.42	35.82	6.85	1.57	0.92	29.69	2.93

F/G. 25